Message

From: Justin Anthony Knapp [justin.k@allpowerlabs.com]

Sent: 1/22/2018 7:52:45 PM

To: BECKHAM, LISA [BECKHAM.LISA@EPA.GOV]

CC: Scott Gurule [scott.g@allpowerlabs.com]; Joel Armin-Hoiland [joel@allpowerlabs.com]

Subject: Re: EPA determinations requested

Lisa,

I asked for confirmation from Alfonso Borja of BAAQMD who referred me back to this:

The regulation in question is 40 CFR Part 60, Subpart JJJJ. There is a section for landfill and digester gas engines. However, the definitions are broad and I wanted to make sure that EPA does not consider your engine as part of these type of combustion units.

So we had that CFR citation before but this also provides some context on his thinking and what we need. As I mentioned on the phone, we've never had someone frame our technology as landfill or digester gases. And coming from someone who is not an engineer, I think it's clear that our wood gas/producer gas/syngas is definitely not landfill or digester gas by any definition that I see in CFR:

Landfill gas per CFR: "Landfill gas means gas produced as a result of anaerobic decomposition of waste materials in the landfill. Landfill gas generally contains 40 to 60 percent methane on a dry basis, typically less than 1 percent non-methane organic chemicals, and the remainder being carbon dioxide." Digester gas: "Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO2."

Please let me know if there's anything else APL can do to help you. We look forward to your response.

Thank you,

--Justin

On Mon, Jan 22, 2018 at 1:35 PM, Justin Anthony Knapp < justin.k@allpowerlabs.com > wrote: Lisa,

Thanks again--that was one of the best phone calls with a regulatory agency I've ever had. I will get back to you as soon as possible re: your question about engine regulation from BAAQMD.

Hope you're having a good Monday, --Justin

On Mon, Jan 22, 2018 at 1:15 PM, Justin Anthony Knapp < justin.k@allpowerlabs.com > wrote: We will call in two shakes.

--Justin

On Mon, Jan 22, 2018 at 1:14 PM, BECKHAM, LISA < BECKHAM.LISA@epa.gov > wrote:

So sorry Justin, my last meeting ran late. I'm available now.

From: Justin Anthony Knapp [mailto:justin.k@allpowerlabs.com]

Sent: Monday, January 22, 2018 10:09 AM

To: BECKHAM, LISA < BECKHAM.LISA@EPA.GOV>

Subject: Re: EPA determinations requested

Hello Lisa,

Are you free now? We made a call in to you and it looks like you weren't available.

Please advise,

--Justin

On Wed, Jan 17, 2018 at 8:06 PM, Justin Anthony Knapp < justin.k@allpowerlabs.com > wrote:

Lisa,

Sounds like a plan. I'll just dial you directly unless you think it's necessary to have a conference call line. I will likely have someone else from our Projects team on the phone as well.

--Justin

On Wed, Jan 17, 2018 at 7:01 PM, BECKHAM, LISA < BECKHAM.LISA@epa.gov > wrote:

How about Monday at 10am?

From: Justin Anthony Knapp [mailto:justin.k@allpowerlabs.com]

Sent: Wednesday, January 17, 2018 3:28 PM **To:** BECKHAM, LISA < <u>BECKHAM.LISA@EPA.GOV</u>> **Subject:** Re: EPA determinations requested

Hello Lisa,

A pyrolysis process is exactly what we are running. Did you receive the attachments from earlier? If not, I have included them below and that should give you the basics. Note that some of the paperwork refers to our PP20 generation of machines and some to the PP30--they are fundamentally very similar in terms of their mechanics, emissions, etc.

Time is of the essence for us, so please let me know what is best for you on Monday. I have a medical appointment around 16:30 but I am free prior to then or can clear my calendar otherwise for you.

--JAK

On Wed, Jan 17, 2018 at 6:03 PM, BECKHAM, LISA < BECKHAM.LISA@epa.gov > wrote:

Hi Justin,

Helga forwarded your question to me. You are correct in guessing that an "EPA determination" is a term of art. However, the process may be a bit more involved than you were expecting. Unfortunately, it is not as simple as completing a form. To figure out your next steps it may help to understand your process a little. Also, it depends on how "formal" of a response BAAQMD is looking for. We sometimes provide informal guidance by email, but official "EPA determinations" are usually made by letter and go through review here in the Regional Office and at our headquarters offices (i.e. it takes more time).

It sounds like you may be operating a pyrolysis process? We could setup a time to discuss so I can make sure I understand what you are doing. Unfortunately, I'm pretty busy this week. But, a call Monday or Tuesday next week would work.

Lisa Beckham

Environmental Engineer

Air Permits Office

EPA Region 9

(415) 972-3811

From: Justin Anthony Knapp [mailto:justin.k@allpowerlabs.com]

Sent: Tuesday, January 16, 2018 3:22 PM

To: R9.Info < R9.Info@epa.gov >

Cc: Joel Armin-Hoiland <joel@allpowerlabs.com>; Scott Gurule <scott.g@allpowerlabs.com>

Subject: EPA determinations requested

Hello Helga,

Thank you kindly for the call back—your alacrity is outmatched only by your professionalism. I have reproduced the two EPA determination requests from the BAAQMD below. Additionally, I have attached

three documents which should give you a brief overview of how our machinery works. (Note that our technology is undergoing a shift from the "PP20" to "PP30" generations but they are fundamentally very similar.) My sense is that it should be obvious that our units are not problematic from the EPA's perspective but I look forward to getting a documented answer from your agency.

If a flame is present within the pyrolysis chamber, please obtain a determination from the Environmental Protection Agency (EPA), identifying whether S-1 is an incinerator and subject to a New Source Performance Standard (NSPS) or National Emission Standard for Hazardous Air Pollutants (NESHAP).

and

Please obtain a determination from the EPA, identifying whether S-2 is a landfill gas engine and subject to the requirements of 40 CFR Part 60, Subpart JJJJ.

Is an "EPA determination" a term of art? That is, e.g. do we need a specific form which is signed by a planner or will an email response probably be sufficient? Please let me know what else you may need from me to make your determinations.

Thank you, --Justin

--

Justin Anthony Knapp

---Grants Administrator

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---Grants Administrator

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